1: Gillin E-5 (1932-33) 1936 SR9 Carib SR9

something to bring back. No man will return from a hunting excursion empty handed to face the ridicule and anger of his wife; and as a consequence men are occasionally absent from their homes for two or three days, sleeping in the bush, until they have acquired some game, if nothing more than a turtle or a couple of birds' eggs, to bring back to the household. Under ordinary circumstances a man usually hunts alone with the help of a dog, although hunting parties are occasionally formed for the pursuit of drove animals, such as bush hog, or unwieldy beasts such as maipuri (bush cow). In fishing a man has his own private lines which he tends himself, but when a stream is poisoned, the cooperation of several men, and frequently of women and children, is enlisted.

The women of the household attend to the field products, digging the cassava and gathering the other edibles, as well as the cooking and preparation of all food. In these activities they are assisted by men too old to hunt and by young children. The cutting and preparation of the field, is, however, the man's task. And both the men and the women cooperate to do the planting.

Hunting. In the procuring of land animals, only three kinds of devices are used: the bow-and-arrow, the trap, and, rarely, the shot gun. Blow guns and spears are not in use at the present time, nor is there any memory of their former use by the Caribs. Such contrivances are said by the old men to have been used by the Akawai who formerly had settlements on the river and they are occasionally brought into the area as curiosities from distant Akawai settlements.[1]

Bows are made from four different kinds of wood and vary slightly according to the material. These four varieties are washiba (Carib, same; unidentified), letter wood (Carib, paidya; *Brosium aubletti*), bopa (Carib, same; unidentified), and yarriyarri (Carib, same, *Anaxagorea* sp.). The washiba bow in cross section is a fat oval; it is somewhat flatter on the belly than on the back and the wood is almost black. The letter wood bow has the same general

[1] Alec, for instance, says that when he was young his uncle brought a blow pipe home after he had made a trip to the head of the Cuyuni. There he had bought the weapon from the Akawais. It was made in one piece from a palm stem with the pith removed. His uncle gave him instructions concerning it. If you hit the quarry and it runs away, the poison is spoilt and the blow pipe must be thrown away. "This is because the game runs away with the essence of the poison" robbing the poison on your unused darts of its power and the weapon of its efficacy. To be successful you must try to hit the game two or three times and cut out the parts around the wounds.

1: Gillin E-5 (1932-33)1936 SR9 Carib SR9

shape as the washiba, but the wood has transverse dark markings across the belly of the bow. The bopa bow is flatter in cross section than the two preceding types. These three types of bow are provided with a groove running the full length of the back, in which is held the surplus part of the bow string which is used for strengthening the weapon. The yarriyarri bow is round in cross section, yellowish or light brown in color, and has no groove in its back.

The body of the bow in all types tapers gradually from the middle toward both ends. At each end, the taper is suddenly broken by a small shoulder, marking the base of a short blunt-ended peg whittled out of the wood in one piece with the rest of the bow. Around this small peg at each end, the bow string is attached. In an unstrung bow the head is often indistinguishable from the foot. The string is attached to the head by a slipknot, whereas at the foot, the string is attached by two half hitches and carried up the back in the groove. It is held in place in the groove by being bound around the bow upon itself in two places. These bindings, which extend around the entire bow, are at approximately the first and third quartiles, respectively, of the bow's length; and between the two bindings the string is carried twice, so that, in effect, two strengthening cords lie along the back of the middle part of the bow, as can be seen in the illustrations. The strengthening, however, is carried only to the upper binding so that the upper quarter of the bow has no support on its back. The bow string, the strengthening along the back, and the bindings are all part of one unbroken length of kraua cord. When stringing a new bow, a man tests it by bending it, with first one end then the other on the ground, to see which end is stiffer; this end is chosen for the foot; a suitable length of cord is paid out and attached to the foot peg by means of the two half hitches above mentioned, a slip knot is made in its end and the bow string tested for length, after which it is attached to the head. Then the remaining loose cord attached to the foot is bound in the groove along the back to serve as strengthening.

I had the men teach me to make several bows. In making a washiba bow we went early one morning into the bush and found an old washiba log which had fallen to the ground. With a cutlass, a piece about six feet long, square in cross section, and about three

1: Gillin E-5 (1932-33) 1936 SR9 Carib SR9

gorea sp.) are the most common; the line is made of kraua fibre. 226
Rod fishing is most commonly done from korials, although fre- 824
quently little boys amuse themselves by fishing with a rod from [857]
the bank. Each night a man, if his settlement is near the river, puts out a set line, to which are attached several hooks. These set lines are stretched across the river, fastened at either end to a stake of yarriyarri set in the water near the shore. Usually each hook has to be visited in a korial, although some more ingenious members of the tribe, perhaps through outside suggestion, have [176] rigged up pulley arrangements at the opposite shore so that the line can be set and pulled in by a man standing on the bank.

Fish are also shot with arrows of the types, described above, especially made for the purpose. This seems to be a method very rarely used at the present time, and during my sojourn in the Carib country I saw it employed only twice. The men say that fish shooting is difficult because of the vegetable stain in the water which reduces visibility, and is only effective near rocks where the marksman can gain a steady perch high enough above the water to see the game.

The most productive fishing method is poisoning. The haiari 226
root (? *Lonchocarpus* sp.) is the most generally used poison on the 137 ●
Barama. Two varieties are recognized, the "black haiari" (? *L. densiflorus*) and the "white haiari" (? *L. rufescens*). The former is the most commonly found and oftenest used for fish poisoning. The two other fish poisons generally used in the Barama country are konami (? *Clibadium* sp.) and wa'u (Creole, mora balli). Other poisons used in the Guianas are mentioned by Roth, but I have failed to find evidence of their use in this area

The river itself, as well as practically all of its tributary creeks, 226
is regularly poisoned, although I understand that this practice is forbidden by colonial law because of the devastating effect which it is supposed to have on the fish supply. As one proceeds up the Barama one is impressed by the fact that across the mouth of almost every creek stands a wickerwork fence of nibi (a bush plant which is also used in making basketry), a sure sign that the creek has been poisoned, because the fence has been placed there to catch the dead or stupefied fish as they float downstream under the influence of the poison. When it is decided to poison a creek or river, the whole settlement usually turns out and the affair is

1: Gillin E-5 (1932-33) 1936 SR9 Carib .SR9

calabash are cultivated: a, apotonong kwa'yepwi, large, spherical in shape except for small "spout" near the stem, grows on ground vine; b, morutuku, long, like a water melon, grows on ground vine like a melon; c, pawsi, small and elongated, grows on bush; d, shi'-iyongkwa'imyako epu, small and globular, grows on bush. Types a and b are planted from seed. They are perennial. Types c and d are planted from shoots cut from a living bush. The vines bear in seven months, the bush types in a year and a half. The pap from the inside of the fruit is sometimes used as fish bait and is sometimes cooked as a vegetable, but the principal use to which the fruits are put is in dried form as vessels for liquids. (See section on Utensils.) An interesting example of sympathetic magic is the practise of tying to the calabash plants the shells of the large landsnail, which in shape and color often resemble a small calabash. This practise is held to insure a good yield from the plant.

The cotton (maru'epu) trees are also planted near the houses. They are planted from seed and reach a height of eight to ten feet. They are said to bear in four to five months. Only one variety is grown. The seeds are removed by hand from the cotton bolls and are not used for any other purpose.

A large number of foods are gathered from the forest in season. The following is only a partial list of the edible bush products.

Plums (mope)[1] — bear once a year, about January; round and greenish in color; eaten raw and boiled.

Waiti — fruit in a pod like beans, grows on tree; seeds surrounded by sweet velvety meat; three varieties: paidyowa, long pod; posindyo, small short pod, grows along river banks; anakara, broad stubby pod. The seeds are sucked, but the fruit has little food value.

Asipoko — a round reddish fruit with soft tart flesh.

Arawiya — plum-like fruit.

Sawari nuts (*Caryocar [Pekea] tuberculosa*) — the Brazil nut of commerce.

Mora seed (*Dimorphandra mora Bth.*) — in times of scarcity grated and baked into bread, sometimes mixed with cassava.

Greenheart seed (*Nectandra rodioei Hooker*) — same use as mora seed.

Ballimanni seeds (?sp.) usually eaten by accouri and labba, but used by man in time of want.

Cashew nuts (*Anacardium sp.*).

The fruit of the kokerite palm (*Maximiliana regia*).

Fruit of the ite palm (*Mauritia flexuosa*).

[1] ?*Spondias lutea.*

1: Gillin E-5 (1932-33)1936 SR9 Carib SR9

222 The "cabbages," or fresh shoots, of several palms[1]
262 Akoyuru seed (*Astrocaryum tucuma*).
137 Arrow root (*Maranta indica, Miranacistrina*).

263 Such salt as is eaten nowadays is obtained in trade. Some of the older people, however, remember seeing leaves of certain trees burned and the ashes mixed with food as a condiment.

252 462 Cooking. The women of the household cook all food which is eaten at home, although men are able to prepare their own meals when unavoidably detained in the bush. The desire to have the women do the cooking, as well as the other pleasures of connubiality, accounts for the fact that a man going on a long journey will always attempt to have his wife accompany him.

251 Uncooked meat may be preserved by salting and by smoking over the fire.

252 Certain foods may be roasted in the ashes, others roasted on the end of a green stick, others baked on the pan, but the most universal way of preparing vegetables and meat is to make them into "pepper pot." In every Carib house a pot will be seen on the fire stones at almost any time of day. Meat and vegetables are cut into small pieces and put into the pot with water and a suitable amount of cashidipyo and set to boil. The cashidipyo lends a slightly acrid or peppery taste to the mess, somewhat like the flavor imparted by Worcestershire sauce.

264 No set times are observed for meals, although food is quite regularly taken upon arising and in the evening. Men and boys eat their fill from the pot alone, after which the females are allowed to stay their hunger with the remainder. One usually squats over the pot with a cake of cassava and a pot of peppers near by. One reaches into the pot with the bare hands and extracts a piece of meat or a vegetable which may be popped into the mouth or may be laid on a piece of cassava bread, which is bent over to make a sandwich. According to the dictates of personal taste a pepper may be included in the sandwich. If one desires the gravy in the bottom of the pot, one soaks a piece of cassava bread in it. When the pot is emptied more ingredients are added without cleaning out the pot. In this way there is always a supply of cooked food on hand, and the constant simmering keeps it from spoiling.

[252]

[1] [illegible] *Arum sieversii*, *Bactris sieversii*. See Schomburgk, 1922-23, *Travels in British Guiana*, Vol. I, p. 22.

II

HISTORY OF REGIONAL CONTACTS AND SUBSISTENCE RESOURCES

131 The headwaters of the Barama River are on the eastern slope of
133 the low divide which marks the Venezuelan frontier. The Barama River, fed by many tributaries, meanders through the rain forest in a generally easterly direction for about 100 miles until it flows into the Waini River. The Great Falls at Towakaima divides the Barama River drainage basin into an upper and a lower section. This report concerns the upper section. Figure 1 is a map of the Barama River in relation to the rest of Guyana. Figure 2 is a more detailed map of the Barama River area.

132 The physical environment of the Upper Barama area remains as
[114] Gillin describes it (1936:xii-xiii). Rainfall fluctuates from year to year, usually accumulating 110 to 120 inches annually (King 1968:
137 148). The drainage basin of the Upper Barama River supports a forest
[133] vegetation with a highest canopy of about 100 feet. The flora is mixed, and species occur in all possible combinations. The tall (35M) mora tree is perhaps the most impressive species (King 1968:22).

132 There is very little terrain that is not inundated by seasonal rain.
133 Bishop reports no high ground suitable for an air strip between Towakaima and the mouth of the Baramita tributary (1941:6).

133 From Baramita mouth to Towakaima, the basin is a wide, flat plain with a gentle gradient (Bishop 1941:8). The Baramita flows

[TEXT CONTINUED ON PAGE 9]

241 To stagger the harvest, planting occurs over a period of time. However, once planted a field is rarely tended. Trips are made only to harvest foods as they are needed. As grasses choke the cultigens, a new field is cut. This happens about every two or three years.

241 Over time, new additions have been made to this intermixture of
• 137 species in the fields. These have come from several sources.
*197 Table 1 includes a list of the plants Gillin found growing in fields and by house sites in 1932-33. Of these, banana, plantain, yam, eddo, sugar cane, and citrus fruits were introduced to the New World by Europeans (Gillin 1948:825). Obviously, the Barama River Caribs do not recognize these origins. In 1970-71, there were many additions to Gillin's list. The ones which have been introduced from Georgetown are recorded separately in Table 1.

241 Also, in 1970-71, naturally occurring forest species were found
824 in the cultivated fields. As the cultigen community is a duplication of the forest flora community, this reflects simply a change of location convenient to the human consumer. Thus, the boundary is merged between the cultigen community and the naturally occurring floral community. All local vegetable food sources are available from energy captured from the cycling of energy within the rain forest flora community, or a duplication of it.

241 This integration of food production within the extant biotic
*197 community has only recently been altered. Fields convenient to
654 locations of outside resources have been weeded and replanted for up to ten years. The new agricultural methods introduced by the government emphasize the single cash crop grown on a larger, exposed

[TEXT CONTINUED ON PAGE 13]

TABLE 1

CULTIGENS

241
• 137
*177

1932-33

manioc (Manihot utilissima)
plantains of two varieties
bananas of ten varieties
pineapple
three types of yams
tanya
eddo
sugar cane
two types of squash
red and white maize
lime
papaya
kraua grass
five varieties of pepper
four types of calabash bushes
cotton tree

(Gillin 1936:14-21).

1970-71 Additions

sweet manioc
watermelon
coconut
coffee
pumpkin
potato
sweet potato
rice
dashin
okra
sapodillo
calalu
tomato
koraila
medi
pigeon pea
peanut
black-eyed pea
red beans
guava
sour sop
breadnut
grapefruit
orange
mango
tangerine
onion
bora bean
gourd
pokchoy
mustard
thyme
lemon grass
sugar apple
cashew
avocado

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

TABLE 2

FOREST FLORAL FOODS

222
262
• 137

1932-33

plums
Waiti, three varieties of fruit in pod-like beans (Waikey, Iga splendens - present author's note)
Asipoko, round reddish fruit
Arawiya, a fruit
mora and greenheart seeds (Dimorphandra mora, Nectandra rodioei Hooker)
Ballinani seeds
cashew nuts (Anacardium sp.)
fruit of the Kokerite and Ite palms (Maximiliana regia, Mauritia flexuosa)
the "cabbages" or fresh shoots of several palms
Akoyuru seeds (Astrocaryum tucuma)
arrow root (Maranta indica, Miramosissima)
Brazil nut (Caryocar tuberculosa) (Gillin 1936:21-22).

1970-71 Additions

locust seeds (Hymenae acourbaril)
monkey pot (Lecythis davisii)
pimpler pear
Atupamu, fine red seed
Apotari, seed
Toro, nut
Semusemu, fruit
Calumedi, black seed
Turu, palm leaves for tea
Cawawi, a nut from a rope

walking through the forest is always on the lookout for casual protein. The smallest bird egg, an embryonic bird, or what have you, are saved and consumed.

The more intensive food quest for the larger animals is aided by the introduction of rifles. A few dilapidated shotguns were in use by Upper Barama River Caribs in 1932-33 (Gillin 1936:8). Currently, only a limited number of men own rifles and ammunition is not always available. As a consequence, the local technology of hunting, including bow and arrows and traps as described by Gillin (1936:3-9), is maintained.

The fish poisons described by Gillin are also in use (1936:11). Rather than the haiari root, the kunami leaves, picked from plants in the fields, are more frequently used around the air strip, where the harvesting of fish has also changed. After repeated poisoning of the nearby streams, only a handful of small fish, three inches and under, are collected in this manner.

With regard to domesticated fauna, there exists the same lack of a specific boundary which characterizes the floral resources. Chickens are clearly domesticated. Currently, they and their eggs are eaten. This is a change from an ornamental use reported by Gillin (1936:45). At one time, a few pigs were raised in the area around the air strip. Scrawny dogs who must scavenge for themselves are kept for hunting. Also, a variety of birds and animals, including the kibihi, armadillo, labba, and bush hog, are captured when infants and kept as pets until they are mature. Then they are eaten. Finally, a honey bee nest may be moved to a location convenient to future use.